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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,128	09/09/2003	Yoshiharu Sasaki	8051-1012	9210

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EXAMINER

PHAM, HAI CHI

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,128

Applicant(s)

SASAKI, YOSHIHARU

Examiner

Hai C. Pham

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 9-16 is/are rejected.
- 7) ☒ Claim(s) 2,3,6-8,17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

2. Claims 17 and 18 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. Claims 17 and 18 repeat the same limitation as recited in claims 2 and 6, respectively, i.e., "wherein the radius of curvature of the cylindrical support member is set".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohnishi et al. (US 4,125,842).

Ohnishi et al. discloses a method and apparatus for laser recording of an image character, the method comprising the step of fixing a glass substrate on a cylindrical

support member (the metallic film 19 is made of a glass substrate 1 on which a metallic recording layer 2 is deposited, and is wound on the external surface of the rotary drum 18) (Figs. 2-3) (col. 2, lines 48-54), rotating the cylindrical support member (the drum 18 is rotated in the main scanning direction as shown by the arrow next to the drum in Fig. 3), moving a laser recording head in an axial direction of the cylindrical support member (the recording head is fixed on the rack 17 moving parallel to the rotation axis of the drum in the sub-scanning direction), and modulating and controlling a laser beam based on an image data through the laser recording head to record an image character on the glass substrate (the laser light emitted from the laser source 6 is modulated by the acousto-optical modulator 12 based on the image character data in the form of the facsimile signal S to record the image on the metallic film 19) (col. 3, lines 9-28).

With regard to claim 4, the fact that a plurality of glass substrates or recording media (19) are subsequently fixed onto the cylindrical support member for successive recording is inherent to the automatic facsimile receiver or any image recording system as taught by Ohnishi et al.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi et al. in view of Inoue et al. (US 6,227,109).

Ohnishi et al. discloses all the basic limitations of the claimed invention except for the glass substrate housing cassette, the glass substrate delivery mechanism and the glass substrate fixing mechanism, the fixing mechanism fixing both ends of the glass substrate on the cylindrical support member.

However, it is old and well known in the art for a printing system to include a recording medium supplying unit for subsequently feeding and delivering the recording medium to the printing station, and pressing rollers for holding the recording medium on the surface of the drum as evidenced by Inoue et al., which teaches a printing apparatus having a recording medium supplying apparatus (1020) for supplying the recording medium stacked in the recording medium feeding station (1021), a recording medium pickup apparatus (1022) and a transfer conveyor (1023) for delivering the recording medium to the printing station where the recording medium is pressed and fixed at both ends onto the plate cylinder (2011) using the pressing roller (2027) and the claw (2032) (Figs. 1 and 20).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the device of Ohnishi et al. with the housing cassette, the delivery mechanism and the fixing mechanism as taught by Inoue et al since Inoue et al. teaches this to be well known in the art for a printing system to be able to carry the image recording operation from start to finish.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi et al. in view of Inoue et al., as applied to claim 5 above, and further in view of Vogelgesang et al. (U.S. 5,342,682).

Ohnishi et al., as modified by Inoue et al., discloses all the basic limitations of the claimed invention except for the cylindrical support member being formed with a plurality of discs arranged in an axial direction.

Vogelgesang et al. discloses a rotatable recording drum comprising a plurality of discs (drum sections 12) arranged in the axial direction (Figs. 1A-1B).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the recording drum of Ohnishi et al. with a plurality of drum sections or discs as taught by Vogelgesang et al. The motivation for doing so would have been to provide a sturdy drum body.

8. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi et al. in view of Yamane et al. (JP 62-075602).

Ohnishi et al. discloses all the basic limitations of the claimed invention except for the transfer sheet being superimposed on the glass substrate and the laser recording head exposing the transfer sheet to cause image transfer from the transfer sheet onto the glass substrate, and for repeating the same step for forming a plurality of colors on the glass substrate.

Yamane et al. discloses forming a color filter by overlaying a transfer sheet (dye film layer 6 provided on a base sheet 4) over a transparent base plate (3) made of glass (e.g., silica), exposing the transfer sheet with laser light to transfer the dye in the dye film

layer 96) to the transparent base plate, the procedure being repeated corresponding to the number of necessary colors as required by the color filter (see Abstract).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the dye transfer sheet in the device of Ohnishi et al. as taught by Yamane et al. The motivation for doing so would have been to provide a color filter having high heat resistance and high weather resistance as suggested by Yamane et al.

9. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi et al. in view of Inoue et al., as applied to claim 5 above, and further in view of Yamane et al.

Ohnishi et al., as modified by Inoue et al., discloses all the basic limitations of the claimed invention except for the transfer sheet being superimposed on the glass substrate and the laser recording head exposing the transfer sheet to cause image transfer from the transfer sheet onto the glass substrate, and for repeating the same step for forming a plurality of colors on the glass substrate.

Yamane et al. discloses forming a color filter by overlaying a transfer sheet (dye film layer 6 provided on a base sheet 4) over a transparent base plate (3) made of glass (e.g., silica), exposing the transfer sheet with laser light to transfer the dye in the dye film layer 96) to the transparent base plate, the procedure being repeated corresponding to the number of necessary colors as required by the color filter (see Abstract).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the dye transfer sheet in the device of Ohnishi et al. as

taught by Yamane et al. The motivation for doing so would have been to provide a color filter having high heat resistance and high weather resistance as suggested by Yamane et al.

Allowable Subject Matter

10. Claims 2-3 and 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of claims 2 and 6 is the inclusion therein, in combination as currently claimed, of the limitation "a radius of curvature of the cylindrical support member is set within a bending permissible stress of the glass substrate", which is not found taught by the prior art of record considered alone or in combination.

Claims 3 and 7-8 are allowable because they are dependent from claims 2 and 6 above.

Response to Arguments

12. Applicant's arguments with respect to claims 1, 4-5 and 9-16 have been considered but are moot in view of the new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on (571) 272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HAI PHAM
PRIMARY EXAMINER

July 13, 2006